



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,347	06/01/2001	Larry I. Benowitz	701039-052161	1168

959 7590 06/10/2002

LAHIVE & COCKFIELD  
28 STATE STREET  
BOSTON, MA 02109

EXAMINER

LI, RUIXIANG

ART UNIT	PAPER NUMBER
----------	--------------

1646

DATE MAILED: 06/10/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/872,347

Applicant(s)

BENOWITZ, LARRY I.

Examiner

Ruixiang Li

Art Unit

1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-46 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1 (in part), 2, 4-28, 29 (in part), 30, 31, 35 (in part), 36 (in part), 37, 38, and 44-46, drawn to a method comprising administering to a subject with spinal cord injury a therapeutically effective amount of a macrophage-derived factor, oncomdulin, classified in class 514, subclass 2.
- II. Claims 1 (in part), 2, 4-28, 29 (in part), 32, 33, 35 (in part), 36 (in part), 37, 38, and 44-46, drawn to a method comprising administering to a subject with epilepsy a therapeutically effective amount of a macrophage-derived factor, oncomdulin, classified in class 514, subclass 2.
- III. Claims 1 (in part), 2, 4-28, 29 (in part), 34, 35 (in part), 36 (in part), 37, 38, and 44-46, drawn to a method comprising administering to a subject with Alzheimer's disease a therapeutically effective amount of a macrophage-derived factor, oncomdulin, classified in class 514, subclass 2.
- IV. Claims 1 (in part), 3-28, 29 (in part), 30, 31, 35 (in part), 36 (in part), drawn to a method comprising administering to a subject with spinal cord injury a therapeutically effective amount of a macrophage-derived factor, TGF- $\beta$ , classified in class 514, subclass 2.
- V. Claims 1 (in part), 3-28, 29 (in part), 32, 33, 35 (in part), 36 (in part), drawn to a method comprising administering to a subject with spinal cord injury a

Art Unit: 1646

therapeutically effective amount of a macrophage-derived factor, TGF- $\beta$ , classified in class 514, subclass 2.

- VI. Claims 1 (in part), 3-28, 29 (in part), 34, 35 (in part), 36 (in part), drawn to a method comprising administering to a subject with Alzheimer's disease a therapeutically effective amount of a macrophage-derived factor, TGF- $\beta$ , classified in class 514, subclass 2.
- VII. Claim 39 (in part), drawn to a pharmaceutical composition comprising a macrophage-derived factor, oncomdulin, classified in class 514, subclass 2.
- VIII. Claim 39 (in part), drawn to a pharmaceutical composition comprising a macrophage-derived factor, TGF- $\beta$ , classified in class 514, subclass 2.
- IX. Claim 39 (in part) and 40, drawn to a pharmaceutical composition comprising a macrophage-derived factor, oncomdulin, and a cAMP modulator, classified in class 514, subclass 2.
- X. Claim 39 (in part) and 40, drawn to a pharmaceutical composition comprising a macrophage-derived factor, TGF- $\beta$ , and a cAMP modulator, classified in class 514, subclass 2.
- XI. Claim 39, 41 (both in part), and 42, drawn to a pharmaceutical composition comprising a macrophage-derived factor, oncomdulin, and an axogenic factor, AF-1, classified in class 514, subclass 2.
- XII Claim 39, 41 (both in part), and 42, drawn to a pharmaceutical composition comprising a macrophage-derived factor, TGF- $\beta$ , and an axogenic factor, AF-1, classified in class 514, subclass 2.

Art Unit: 1646

XIII. Claim 39, 41 (both in part), and 43, drawn to a pharmaceutical composition comprising a macrophage-derived factor, oncomdulin and an axogenic factor, inosine, classified in class 514, subclass 2.

XIV. Claim 39, 41 (both in part), and 43, drawn to a pharmaceutical composition comprising a macrophage-derived factor, TGF- $\beta$  and an axogenic factor, inosine, classified in class 514, subclass 2.

2. The inventions are distinct, each from the other for the following reasons. Inventions I-VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP §806.04, MPEP §808.01). In the instance case the different inventions are drawn to completely different methods each having completely different method steps, using different compositions, and having completely different outcomes. Each method is unique and not required one for another. Thus, the methods are exclusive and require non-cohesive searches and considerations.

3. Inventions VII-XIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP §806.04, MPEP §808.01). In the instant case, the different inventions are drawn to completely different compositions, which are not interchangeable and which require non-cohesive searches and considerations.

Art Unit: 1646

4. Inventions I-VI related to Inventions VII-XIII as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown:  
(1) the process for using the product as can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP §806.05 (h)). In the instant case, each composition can be used with more than one method.
5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
6. Because these inventions are distinct for the reasons given above and the search required for a single group is not required for any other group, restriction for examination purposes as indicated is proper.
7. Furthermore, the application contains claims directed to patentably distinct species:  
(a) cAMP modulators, as listed in claim 5; (b) two species of axogenic factors, AF-1 and inosine. These species are completely different products having completely different structures and biological functions which are not interchangeable and which require non-cohesive searches and considerations.

Should applicant elect a group of invention containing these claims, applicant is also required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Art Unit: 1646

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02 (a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103 (a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48 (b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48 (b) and by the fee required under 37 CFR 1.17 (I).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruixiang Li whose telephone number is (703) 306-0282. The examiner can normally be reached on Monday-Friday, 8:30 am-5:00 pm.

Art Unit: 1646

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached on (703) 308-6564. The fax phone number for this Group is (703) 305-3014 or (703) 308-4242.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [yvonne.eyler@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Ruixiang Li  
Examiner  
June 4, 2002



ELIZABETH KEMMERER  
PRIMARY EXAMINER